

IN THE SPECIFICATION:

- (A) On page 1, before the “BACKGROUND OF THE INVENTION” section, please add the following new section:

--RELATED APPLICATION DATA

This application is a divisional of U.S. Patent Appln. No. 09/404,920, filed on September 24, 1999, in the names of Frederic Reblewski, Olivier LePape, and Jean Barbier. This present application is entirely incorporated herein by reference.--.

- (B) Please amend the paragraph at page 10, lines 8-13 as follows:

Preferably, FPGA 100 also includes memory 112, context bus 106, scan register 108, and trigger circuitry 110. Memory 112 facilitates usage of FPGA 100 to emulate circuit designs with memory elements. Context bus 106, scan register 108 and trigger circuitry 110 provide on-chip integrated debugging facility for FPGA 100. These elements are described in U.S. ~~patent application serial number~~ Patent Appln. No. 08/542,838, entitled “A Field Programmable Gate Array with Integrated Debugging Facilities,” ; which is hereby fully incorporated by reference.

- (C) Please amend the paragraph at page 15, lines 14-19 as follows:

In an alternate embodiment of the present invention, signals are routed directly from I/O pins ~~510~~ 518 of FPGA 501 to/from I/O pins 533 of FPGA 503 without being routed through RC 502. I/O circuitry 515 and 536 are both clocked by one of either signal routing clock 509 or signal routing clock 510. Thus, even though a routing chip is not used in this alternate embodiment, the signal routing between FPGAs is still clocked by a signal independent of the user clock signal(s).

(D) Please amend the paragraph at page 22, line 17 through page 23, line 6 as follows:

Chips **1102** and **1104** can simultaneously transfer signals to each other via connection **1108**. Chips **1102** and **1104** each include I/O circuitry, including a driver and a detection logic as illustrated. An output signal **1121** to be output by chip **1102** is driven onto connection **1108** via driver ~~**1122**~~ **1123**. Concurrently, an output signal **1132** to be output by chip **1104** is driven onto connection **1108** via driver **1133**. After the signals are driven onto connection **1108**, detection logics **1125** and **1135** each sample the voltage level of connection **1108**. Based on the sampled voltage level of connection **1108**, as well as possibly the output signal **1132**, detection logic **1135** provides an input signal **1131** to the internal circuitry of chip **1104**, which is representative of output signal **1121** driven by chip **1102**. Similarly, based on the sampled voltage level of connection **1108**, as well as possibly the output signal **1121**, detection logic **1125** provides an input signal **1122** to the internal circuitry of chip **1102**, which is representative of output signal **1132** driven by chip **1104**.